

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A thermophotovoltaic generator apparatus comprising:
 - a burner that is supplied with a fuel and an air, and that burns the fuel;
 - [[An]] an emitter heated by a combustion heat produced by the burner;
 - a photoelectric conversion cell that converts a radiant light from the emitter into electric power;
 - a cell holder portion that holds the photoelectric conversion cell;
 - a cooling device that causes a cooling liquid, said liquid comprising at least two kinds of liquids, a first of the at least two kinds of liquids having a greater specific gravity and a lower boiling point than a second of said at least two kinds of liquid, to receive heat from the photoelectric conversion cell by contacting the cooling liquid and a back surface of the cell holder portion with each other; and
 - a cooling chamber;
 - wherein a surface of the cell holder portion that contacts the cooling liquid is a non-horizontal surface;
 - wherein said first liquid is provided at a lower level than said second liquid;
 - wherein when said first liquid boils, a first portion of a first vapor therefrom absorbs heat from said second liquid; and

wherein a second portion of said first vapor is cooled in the cooling chamber and returns to said lower level as liquid.

2-3. Cancelled.

4. (Original) The thermophotovoltaic generator apparatus according to claim 1, further comprising an external circuit that accelerates circulation of the cooling liquid.

5. (Original) The thermophotovoltaic generator apparatus according to claim 4, wherein the external circuit has a fan that improves a heat dissipation characteristic.

6. (Currently Amended) A thermophotovoltaic generator apparatus comprising:

a burner that is supplied with a fuel and an air, and that burns the fuel;

an emitter heated by a combustion heat produced by the burner;

a photoelectric conversion cell that converts a radiant light from the emitter into electric power;

a cell holder portion that holds the photoelectric conversion cell; ~~[[and]]~~

~~[[“]]~~an outer shell member surrounding the cell holder portion containing a cooling liquid, the cooling liquid comprising at least two kinds of liquids, a first of the at least two kinds of liquids having a greater specific gravity and lower boiling point than a

second of the at least two kinds of liquids, to receive heat from the photoelectric conversion cell by bringing the cooling liquid and a surface of the cell holder portion in contact with each other, and

a cooling chamber;

wherein a surface of the cell holder portion that contacts the cooling liquid is a non-horizontal surface;

wherein said first liquid is provided at a lower level than said second liquid:

wherein when said first liquid boils, a first portion of a first vapor therefrom
absorbs heat from said second liquid: and

wherein a second portion of said first vapor is cooled in the cooling chamber and
returns to said lower level as liquid.

7. (Previously Presented) A thermophotovoltaic generator apparatus according to claim 6, further comprising a cooling chamber receiving and cooling vapor from the heated cooling liquid in the outer shell member.

8. (Previously Presented) A thermophotovoltaic generator apparatus according to claim 7, wherein the cooling chamber comprises a plurality of cooling fins.